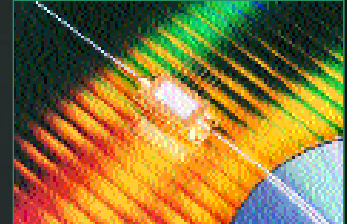
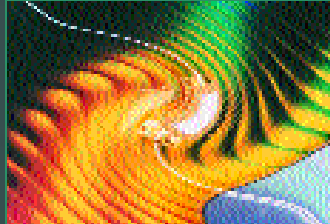
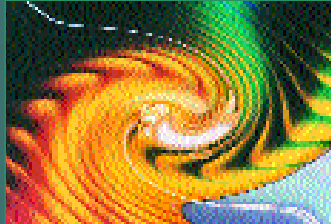


COMMUNICATIONS AND DISPLAYS



With the rapid growth of fiber optics and the introduction of smaller displays, people are communicating faster and more efficiently. Fiber-optic cables and networks are rapidly encircling our Nation, increasing the bandwidth to handle a dizzying array of new interactive communications services. Miniature displays are enabling smaller personal communications devices—such as beepers, cellular phones, and personal digital assistants—allowing Americans to stay in touch while on the move.

Advanced technology offers much in these areas, allowing, for example, the elimination of unwanted light reflections in fiber-optic cables to improve signal quality. It can also enable displays that are lighter, smaller, more colorful, and more energy-efficient than previously available. These displays will find homes in such diverse markets as advertising, laptop computers, medical devices, video games, and even sport fishing.

Today's Market

The United States is the world leader in fiber-optic cable installations, accounting for one-third of the total worldwide market. As the number of fiber-optic cable installations rises, so does the demand for fiber-optic interconnect products. The North American market for these products was about \$200 million in 1994 and could climb to \$440 million by 2001.¹ The United States is a major player in the worldwide flat-panel display market, which is expected to climb from \$8.6 billion in 1995 to about \$15.8 billion by the year 2000.²

Tomorrow's Opportunity

BMDO has funded numerous photonics, electronics, computer-related, and even power technologies for tracking and destroying ballistic missiles that lend themselves to the communications and display industries. The following section highlights six of these technologies and the companies that are commercializing them.

¹Kotelly, George. 1996. The communications future is fiber. *Lightwave*, December, 4.

²Electronic Trend Publications. 1996. Worldwide flat panel display markets and trends. March. World Wide Web at <http://www.electronictrendpubs.com/fpd.htm>.